



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

D5321-5

Job Sheet 204437



Part No: D5321-5

Job Qty: 60 pcs

Part Name: Ring



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 12/10/19

Job Tracking No:

Due Date: 1/20/20

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV B IPP REV:A 16.03.28 AS PER DWG REV.B DD VERF:JLM

Ship Via:

## Bill of Materials

## Job Routing

| Op No | Operation                     | Qty    | Start Date | Due Date | Standard Setup Run Hrs Hrs | Workcenter/Supplier<br>Workcenter / Supplier Lead Time | Sign-off    |
|-------|-------------------------------|--------|------------|----------|----------------------------|--------------------------------------------------------|-------------|
| 100   | Purchasing                    | 60 pcs | 1/20/20    | 1/20/20  | 0.00 0.00                  | Purchasing - 1                                         | DEC 12 2019 |
|       |                               |        |            |          |                            | Purchasing - 2                                         |             |
|       |                               |        |            |          |                            | Purchasing - 3                                         |             |
| 110   | Packaging 2-1 - Receive - B4B | 60 pcs | 1/20/20    | 1/20/20  | 0.00 0.00                  | Packaging 2 - 1 - B4B                                  |             |
|       |                               |        |            |          |                            | Packaging 2 - 2 - B4B                                  |             |
|       |                               |        |            |          |                            | Packaging 2 - 3 - B4B                                  |             |
|       |                               |        |            |          |                            | Packaging 2 - 5 - B4B                                  | DEC 12 2019 |
|       |                               |        |            |          |                            | Packaging 2 - 4 - B4B                                  |             |
|       |                               |        |            |          |                            | Packaging 2 - 6 - B4B                                  |             |
|       |                               |        |            |          |                            | Packaging 2 - 7 - B4B                                  |             |
|       |                               |        |            |          |                            | Packaging 2 - 8 - B4B                                  |             |
|       |                               |        |            |          |                            | Packaging 2 - 9 - B4B                                  |             |
|       |                               |        |            |          |                            | Packaging 2 - 10 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 11 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 12 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 13 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 14 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 15 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 16 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 17 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 18 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 19 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 20 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 21 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 22 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 23 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 24 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 25 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 26 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 27 - B4B                                 |             |
|       |                               |        |            |          |                            | Packaging 2 - 28 - B4B                                 |             |



Container No: S240070



Part: D5321-5

Job No: 204437

Serial No/Batch: S240070

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

Date: 12/12/19

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|     |                             |        |         |                        |                        |
|-----|-----------------------------|--------|---------|------------------------|------------------------|
|     |                             |        |         | Packaging 2 - 29 - B4B |                        |
|     |                             |        |         | Packaging 2 - 30 - B4B |                        |
|     |                             |        |         | Packaging 2 - 31 - B4B |                        |
|     |                             |        |         | Packaging 2 - 32 - B4B |                        |
|     |                             |        |         | Packaging 2 - 33 - B4B |                        |
|     |                             |        |         | Packaging 2 - 34 - B4B |                        |
|     |                             |        |         | Packaging 2 - 35 - B4B |                        |
|     |                             |        |         | Packaging 2 - 36 - B4B |                        |
| 120 | QC 6                        | 60 pcs | 1/20/20 | 0.00 0.00              | QC 6 - 9               |
|     |                             |        |         |                        | QC 6 - 68              |
|     |                             |        |         |                        | QC 6 - 61              |
|     |                             |        |         |                        | QC 6 - 40              |
|     |                             |        |         |                        | QC 6 - 81              |
|     |                             |        |         |                        | DEC 1 8 2019           |
| 130 | Packaging 3-1 - Stock - B4B | 60 pcs | 1/20/20 | 0.00 0.00              | Packaging 3 - 1 - B4B  |
|     |                             |        |         |                        | Packaging 3 - 2 - B4B  |
|     |                             |        |         |                        | Packaging 3 - 3 - B4B  |
|     |                             |        |         |                        | Packaging 3 - 4 - B4B  |
|     |                             |        |         |                        | Packaging 3 - 5 - B4B  |
|     |                             |        |         |                        | Packaging 3 - 6 - B4B  |
|     |                             |        |         |                        | Packaging 3 - 7 - B4B  |
|     |                             |        |         |                        | Packaging 3 - 8 - B4B  |
|     |                             |        |         |                        | Packaging 3 - 9 - B4B  |
|     |                             |        |         |                        | Packaging 3 - 10 - B4B |
|     |                             |        |         |                        | Packaging 3 - 11 - B4B |
|     |                             |        |         |                        | Packaging 3 - 12 - B4B |
|     |                             |        |         |                        | Packaging 3 - 13 - B4B |
|     |                             |        |         |                        | Packaging 3 - 14 - B4B |
|     |                             |        |         |                        | Packaging 3 - 15 - B4B |
|     |                             |        |         |                        | Packaging 3 - 16 - B4B |
|     |                             |        |         |                        | Packaging 3 - 17 - B4B |
|     |                             |        |         |                        | Packaging 3 - 18 - B4B |
|     |                             |        |         |                        | Packaging 3 - 19 - B4B |
|     |                             |        |         |                        | Packaging 3 - 20 - B4B |
|     |                             |        |         |                        | Packaging 3 - 21 - B4B |
|     |                             |        |         |                        | Packaging 3 - 22 - B4B |
|     |                             |        |         |                        | Packaging 3 - 23 - B4B |
|     |                             |        |         |                        | Packaging 3 - 24 - B4B |
|     |                             |        |         |                        | Packaging 3 - 25 - B4B |
|     |                             |        |         |                        | Packaging 3 - 26 - B4B |
|     |                             |        |         |                        | Packaging 3 - 27 - B4B |
|     |                             |        |         |                        | Packaging 3 - 28 - B4B |
|     |                             |        |         |                        | Packaging 3 - 29 - B4B |
|     |                             |        |         |                        | Packaging 3 - 30 - B4B |
|     |                             |        |         |                        | Packaging 3 - 31 - B4B |
|     |                             |        |         |                        | Packaging 3 - 32 - B4B |
|     |                             |        |         |                        | Packaging 3 - 33 - B4B |
|     |                             |        |         |                        | Packaging 3 - 34 - B4B |
|     |                             |        |         |                        | Packaging 3 - 35 - B4B |
|     |                             |        |         |                        | Packaging 3 - 36 - B4B |
| 140 | QC 21 - SA                  | 60 pcs | 1/20/20 | 0.00 0.00              | QC 21 - SA - 21        |
|     |                             |        |         |                        | QC 21 - SA - 70        |
|     |                             |        |         |                        | QC 21 - SA - 53        |

DAS  
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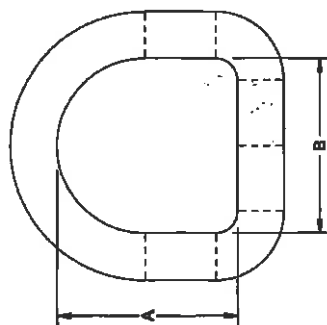
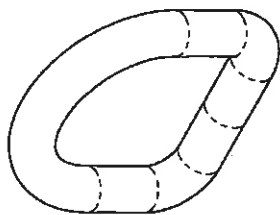
DEC 1 9 2019

Part Op 100 - Issue P/O: \_\_\_\_\_ Possible supplier: McMaster Carr Supplier P/N: 9372T21  
 Descriptions: 110 - (Receive & Inspect for Damage & Mat'l Certs)  
 120 - (QC6- All purchased or subcontracted products)  
 130 - (Identify as per dwg & Stock Location: \_\_\_\_\_)  
 140 - (QC21- Final Inspection - Work Order Release)

| Job BOM                            |                |              |                |           |
|------------------------------------|----------------|--------------|----------------|-----------|
| Part / Item                        | Component Name | Quantity     | Operation      | Container |
| 9372T21                            | Ring (D5321-5) | 60 Ea (1 ea) | 100-Purchasing | S240069   |
| Job Allocations                    |                |              |                |           |
| Operation                          | Component Part | Required     | Inventory      | Allocated |
| 100-Purchasing                     | 9372T21        | 60           | 0              | 0         |
| Part Specifications                |                |              |                |           |
| Specifications could not be found. |                |              |                |           |

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# SPECIFICATION CONTROL DRAWING



SHOP COPY  
RETURN TO  
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UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 204437 M.C.S.  
19-12-10

**D5321-X RING**

| PART NUMBER | VENDOR         | VENDOR P/N | BREAK STRENGTH | WORKING LOAD LIMIT | WEIGHT   | DIM 'A' | DIM 'B' | DIM 'C' | MATERIAL            |
|-------------|----------------|------------|----------------|--------------------|----------|---------|---------|---------|---------------------|
| D5321-1     | U.S.C.C.       | MR15       | 8,000 lbs      | 2,000 lbs          | 0.22 lbs | 1.50    | 1.45    | 0.38    | ZINC PLATED STEEL   |
| D5321-3     | ANCRA          | 48557-11   | 5,000 lbs      | 1,866 lbs          | 0.08 lbs | 1.50    | 1.50    | 0.25    | CAD PLATED STEEL    |
| D5321-5     | MCMMASTER-CARR | 9372721    | 600 lbs        | 200 lbs            | 0.05 lbs | 0.81    | 1.06    | 0.22    | NICKEL PLATED STEEL |



- NOTES:
- 1) MATERIAL: SEE TABLE
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART OSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: N/A
  - 6) IDENTIFICATION: IDENTIFY PER OSI 044 6.7
  - 7) WEIGHT: SEE TABLE

RELEASED  
2016-03-23  
2016-03-23  
2016-03-23

|               |  |          |  |                             |  |
|---------------|--|----------|--|-----------------------------|--|
| B ADD D5321-5 |  | D8       |  | 16.02.08                    |  |
| A NEW RELEASE |  | D8       |  | 16.02.30                    |  |
| REV.          |  | BY       |  | DATE                        |  |
| DESIGN        |  | D8       |  | DESCRIPTION                 |  |
| DRAWN         |  | AK       |  | DART AEROSPACE LTD          |  |
| CHECKED       |  | ML       |  | HAWKESBURY, ONTARIO, CANADA |  |
| MFG. APPR.    |  | DD       |  | DRAWING NO.                 |  |
| APPROVED      |  | WM       |  | D5321                       |  |
| DE APPR.      |  | DSC      |  | TITLE                       |  |
| DATE          |  | 16.02.08 |  | SCALE                       |  |
|               |  |          |  | NTS                         |  |

COMPANY: DART AEROSPACE LTD  
HAWKESBURY, ONTARIO, CANADA  
DRAWING NO. D5321  
SHEET 1 OF 1  
SCALE NTS  
NOT TO BE USED FOR ANY PURPOSES OR CONSIDERED TO BE A PART OF THE DRAWING UNLESS IT IS  
IDENTIFIED BY THE COMPANY'S LOGO AND SIGNATURE



Entered: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐

NCR No. \_\_\_\_\_

| DISPOSITION                                                                                                                                                                                                                                                                                                                                                    |                                                                                                         | DEPARTMENT/PROCESS                                                                                             |                                                                                                                 |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                              |              |  |  |  |                                                                                                                                                                                                                                                                                                        |              |                        |  |  |                                                                                                                                                                                                                                                  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Job: _____                                                                                                                                                                                                                                                                                                                                                     | Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | Skid-tube <input type="checkbox"/><br>Machining <input type="checkbox"/><br>Large Fab <input type="checkbox"/> | Cross tube <input type="checkbox"/><br>Small Fab <input type="checkbox"/><br>Finishing <input type="checkbox"/> | Eng. (Non-AW) <input type="checkbox"/><br>Prod. Eng. Coord. <input type="checkbox"/><br>Rec/Store/Packaging <input type="checkbox"/> | Engineering <input type="checkbox"/><br>Water Jet <input type="checkbox"/><br>Supplier <input type="checkbox"/><br>Quality <input type="checkbox"/>                                                                                                                                                                          | MRB (QSI042) |  |  |  |                                                                                                                                                                                                                                                                                                        | Completed By |                        |  |  |                                                                                                                                                                                                                                                  |  |
| Date: _____                                                                                                                                                                                                                                                                                                                                                    | Sequence #: _____                                                                                       | QTY Affected: _____                                                                                            |                                                                                                                 |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                              |              |  |  |  |                                                                                                                                                                                                                                                                                                        |              | Lead hand / Supervisor |  |  |                                                                                                                                                                                                                                                  |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                               |                                                                                                         |                                                                                                                |                                                                                                                 |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                              |              |  |  |  |                                                                                                                                                                                                                                                                                                        |              | QC / QA Coordinator    |  |  |                                                                                                                                                                                                                                                  |  |
| Root Cause                                                                                                                                                                                                                                                                                                                                                     |                                                                                                         |                                                                                                                |                                                                                                                 |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                              |              |  |  |  |                                                                                                                                                                                                                                                                                                        |              |                        |  |  |                                                                                                                                                                                                                                                  |  |
| Operator <input type="checkbox"/><br>Manufacturing Process <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/><br>Handling/Preservation <input type="checkbox"/><br>Material <input type="checkbox"/><br>Product Improvement <input type="checkbox"/><br>Process Improvement <input type="checkbox"/><br>Human Factors <input type="checkbox"/> |                                                                                                         |                                                                                                                |                                                                                                                 |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                              |              |  |  |  |                                                                                                                                                                                                                                                                                                        |              |                        |  |  |                                                                                                                                                                                                                                                  |  |
| FAULT CATEGORY                                                                                                                                                                                                                                                                                                                                                 |                                                                                                         |                                                                                                                |                                                                                                                 |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                              |              |  |  |  |                                                                                                                                                                                                                                                                                                        |              |                        |  |  |                                                                                                                                                                                                                                                  |  |
| Pressure/Forced <input type="checkbox"/><br>Bending <input type="checkbox"/><br>Crushing <input type="checkbox"/><br>Cracks <input type="checkbox"/><br>Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/><br>Marks/Chatter <input type="checkbox"/><br>Mislabeled <input type="checkbox"/>                                                                 |                                                                                                         |                                                                                                                |                                                                                                                 |                                                                                                                                      | Contamination <input type="checkbox"/><br>Misaligned/off center <input type="checkbox"/><br>BOM/Route <input type="checkbox"/><br>Broken/Damage/Defect <input type="checkbox"/><br>Incomplete/Unclear Instructions <input type="checkbox"/><br>Drill Holes <input type="checkbox"/><br>Fit/Function <input type="checkbox"/> |              |  |  |  | Power Loss/Surge <input type="checkbox"/><br>Folio/Program <input type="checkbox"/><br>Grain Direction <input type="checkbox"/><br>Weld <input type="checkbox"/><br>Wrong Stock Pulled <input type="checkbox"/><br>Out of Sequence <input type="checkbox"/><br>Off-set/Set-up <input type="checkbox"/> |              |                        |  |  | Positioned Wrong <input type="checkbox"/><br>Outside Tolerance <input type="checkbox"/><br>Drawing <input type="checkbox"/><br>Finish <input type="checkbox"/><br>Part Lost/Missing <input type="checkbox"/><br>Misread <input type="checkbox"/> |  |
| Other/Details: _____                                                                                                                                                                                                                                                                                                                                           |                                                                                                         |                                                                                                                |                                                                                                                 |                                                                                                                                      |                                                                                                                                                                                                                                                                                                                              |              |  |  |  |                                                                                                                                                                                                                                                                                                        |              |                        |  |  |                                                                                                                                                                                                                                                  |  |



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## POHB045369



**Supplier:** MCM001-VU  
McMaster-Carr Supply Co,  
P.O. Box 7690  
Chicago, IL 60680-7690 USA  
Phone: 330 995 5500  
Fax: 330 995 9600

**Attention:** N/A,

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**PO No:** POHB045369

**PO Date:** 12/10/19

**Due Date:** 12/16/19

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Lavoie, Chantal  
Phone: 613-623-5200 Ext: 242  
Fax: 613-632-1053  
clavoie@dartaero.com

**Via:** Ground

**Pymt Terms:** Net 60

**Freight Terms:**

**Special Comments:**

DEC 10 2019

### Items

| Line Item    | Job    | Part               | Drawing       | Supplier Part No | Description                                       | Status     | Account | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (USD) | Extended Price |
|--------------|--------|--------------------|---------------|------------------|---------------------------------------------------|------------|---------|----------|----------------|-------------------|---------|------------------|----------------|
| 1            |        | HT-500-CWA-010P-06 | HT-500-CWA 10 | 4089K63 1/PK     | 100 PSI Pressure Gauge                            | Firmed X4  | -       | 12/16/19 | 4 Ea           | 0 Ea              | 4 Ea    | \$19.98/Ea       | \$79.92        |
| 2            | 204426 | 91853A031          | D3978 REV. A  | 1/pk             | Nut receive ea                                    | Firmed X4  | -       | 12/16/19 | 4 Ea           | 0 Ea              | 4 Ea    | \$3.40/Ea        | \$13.60        |
| 3            | 204425 | 92356A662          | D3977 REV. A  |                  | Bolt receive ea                                   | Firmed X4  | -       | 12/16/19 | 4 Ea           | 0 Ea              | 4 Ea    | \$5.66/Ea        | \$22.64        |
| 4            | 204437 | 9372T21            | D5321         | 10/pk            | Ring (D5321-5) AS PER DWG D5321 REV. B receive ea | Firmed X60 | -       | 12/16/19 | 60 Ea          | 0 Ea              | 60 Ea   | \$0.67/Ea        | \$40.20        |
| Grand Total: |        |                    |               |                  |                                                   |            |         |          |                |                   |         |                  | \$156.36       |

CL



Dart Aerospace Ltd.  
1270 Aberdeen St  
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K6A 1K7  
Canada

Tel (613) 632-5200

**PURCHASE ORDER**  
**POHB045369**



**Order Notes**

**Procurement Quality Clauses**

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 DOCUMENT SPECIAL REQUIREMENTS

A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 12/10/19 2:44 PM Dart.Lavoie.Chantal



# Packing List

200 Aurora Industrial Pkwy  
Aurora OH 44202-8087  
330-995-5500  
cle.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

Purchase Order  
**POHB045369**

Order Placed By  
**Chantal Lavoie**

McMaster-Carr Number  
**6271040-01**

Page 1 of 1

12/10/2019

| Line | Product                                                                                                                   | Ordered    | Shipped |
|------|---------------------------------------------------------------------------------------------------------------------------|------------|---------|
| 1 ✓  | <b>4089K63</b> Single Scale Pressure Gauge with Plastic Case, 1/4 NPT Male Connection, Panel Mount, 2" Dial, 0 to 100 PSI | 4<br>Each  | 4       |
| 2 ✓  | <b>91853A031</b> 18-8 Stainless Steel Locknut for Use with Cotter Pins, 3/8"-16 Thread Size, Packs of 1                   | 4<br>Packs | 4       |
| 3 ✓  | <b>92356A662</b> 18-8 Stainless Steel Square-Neck Carriage Bolt, 3/8"-16 Thread Size, 10" Long, Packs of 1                | 4<br>Packs | 4       |
| 4 ✓  | <b>9372T21</b> Steel D-Rings for 1" Maximum Webbing Width, Packs of 10                                                    | 6<br>Packs | 6       |

## Certificate of compliance

This is to certify that the above items were supplied in accordance with the description and as illustrated in the catalog. Your order is subject only to our terms and conditions, available at [www.mcmaster.com](http://www.mcmaster.com) or from our Sales Department.

*Sarah Weinberg*

Sarah Weinberg  
Compliance Manager

**DAS**  
**82**  
**9-89**

DEC 18 2019

**RECEIVED**

DEC 12 2019

**DART AEROSPACE LTD.**